

## BIBLIOGRAPHICAL NOTICES.

XIV. *Transactions of the Medical and Physical Society of Calcutta, Volume the Seventh, 8vo. pp. 497. Calcutta, 1835.*

The present volume of Calcutta Transactions contains thirty papers, independent of those in the appendix. All of these papers are highly interesting, and the majority of them present a record of important facts, as well pathological as therapeutical, especially in reference to the endemic diseases of India.

The *first* article is Observations on the Congenital Goitre in Animals which occurs in Nipal. By A. Campbell, M. D.

It appears that goats and sheep, brought from the north-western provinces of India, where goitre is unknown, to Nipal and Tirhoot, where it is very common, produce goitred young, even when pregnant previous to their arrival; while animals, although unaffected and otherwise in perfect health, produce in Nipal goitred offspring. A female having the disease scarcely ever produces other than diseased young.

Of twenty-three lambs and kids born with bronchocele, under the observations of Dr. C., all died within a few minutes after birth, with one exception, a lamb, namely, having one gland only enlarged. The tumours in the offspring of goitred parents, are invariably larger than in those of healthy animals. The death of the goitred young does not depend upon the size of the tumour.

In all the cases above alluded to, the young were born alive, and at the termination of the usual period of gestation, and with the exception only of the individual that lived and one other, the coat of hair or wool was entirely wanting, save a line running along the spine, and a circular portion on the fore knees (carpi).

"To meet any objections that may be made to this curious fact, on the ground of probable mistakes made in calculating or ascertaining the exact period of impregnation, I beg to state, (observes Dr. C.) that in two instances, a goat produced twins; one of the young ones, in each instance, was completely clothed in hair, had not a goitre, and he lived; the other, born with him, was destitute of hair, was alive when produced, but expired immediately afterwards."

The only survivor of twenty-three individuals born with the disease, was the offspring of a sheep not affected with goitre; its tumour was of one gland only, and about the size of an apricot. The goitre remained stationary in size for about ten days, from which time, until it was six weeks old, Dr. C. did not examine it. At the latter period he was surprised to find the disease had vanished.

Congenital goitre is not known in Nipal to occur in the human subject. Dr. C. has been unable from dissection to ascertain the causes producing death so invariably after birth in animals affected with the disease; they in all probability depend upon a faulty condition of the respiratory passages. This much is certain, that the muscles arising from the sternum, to be inserted into the os hyoides and thyroid cartilage, are, by the pressure of the tumours, nearly obliterated. Besides this, the pressure of the tumours on the larynx may be well supposed to prevent the full and natural development of that 'door of life;' and Dr. C. has observed in all the cases, that the thyroid cartilage is much less hard and firm than the cartilages of the trachea. "The vulgar say 'the creatures die because they cannot suck,' possibly they could not, but they are very rarely

allowed to try; usually the animal when born is feeble, and unable to raise its head, it gasps half a dozen times for breath, and then expires."

The *second* article contains Some Account of a Peculiar Form of Fever which exists in Bengal, by H. H. GOODEVE, M. D.

This form of fever prevails in almost every part of Lower Bengal, but Dr. G. believes it to be unknown in the western provinces, unless perhaps in some very marshy districts. Its principal seat is in the neighbourhood of Midnapore, and in the flat tract of country stretching thence towards the sea, in the direction of Hidgelu, Cuttack and Balasore. It attacks principally the lower classes, and those who are much exposed to hardship, without distinction of sex or age.

"The fever begins with the usual symptoms of languor, head-ache, &c., and is succeeded by a fit of shivering more or less severe, though the symptom is not always very strongly marked, and the hot fit sometimes comes on without its usual predecessor. This latter stage is often very severe; the heat of the skin is great, and the pulse very quick and full, with severe head-ache, often accompanied by low delirium, and at times a semi-comatose condition, in which the patient passes his urine and faeces involuntarily. In other cases, it is much milder. This hot stage continues with more or less severity for about eight and forty hours, when it gradually abates, and in the course of a few hours more the patient is as well as he was before the attack, and able to go about his usual occupation. A critical sweat sometimes occurs, but it does not always terminate the paroxysm. A peculiar local affection, however, accompanies this disease, which is, Dr. G. believes, invariably present, forming one of its distinctive characters. This is an œdemaious swelling, usually of the feet and ankles, with pain, and a burning sensation, and sometimes considerable inflammation, which commences with the first appearance of the fever, and subsides at the termination of the paroxysm, entirely, in the early periods of the diseases, but after the malady has become thoroughly established in the patient's constitution, the swelling remains permanently fixed, the pain and inflammation only returning with each attack. The legs are not, however, always the seat of this affection, in some instances, it prefers the hands and arms, and in others, the thighs, and not unfrequently the scrotum; in the latter case, Dr. G. has often seen a sarcomatous enlargement of the testicle present at the same time, but whether this latter was produced by the former disease, or whether it existed previously, and by its irritation determined the affection towards this part, he cannot say.

"In the early attack of the disorder œdema is not always present: sometimes there is merely a hard inflammatory swelling in the inside of the thigh, or on the arms, and in a few cases, only extreme pain in their situation without inflammation.

"The first paroxysm being over, the patient remains free from another attack for fourteen days, at the expiration of which, the disease returns in the same form, and continues, if unopposed by medical treatment, to repeat its visits twice in every month for many years; not unfrequently during the remainder of the patient's life, and that without materially injuring the vital power. Dr. G. has often seen men who have been labouring under this disease for ten and fifteen years, who, in the intervals of the fever, were in perfect health, and working as hard as their neighbours. It is sometimes, however, though very rarely, fatal; and when it does terminate in death, it is commonly by effusion on the brain."

Dr. G. conceives the accessions of this fever to be evidently influenced by the changes of the moon; the periods of the new and full moon, being those at which the paroxysms recur, and with the utmost regularity.

The native mode of treating this disease is by blood-letting at the very commencement of the attack. In almost all cases they administer a mild purge, and sometimes an emetic. After the bowels are cleared out, they trust, during the remainder of the attacks, to starvation, and tisans of tamarind water. If there be much pain and inflammation in the local affections, leeches and cold

lotions are applied. In the intervals of the paroxysms, febrifuge medicines are given, and amongst others, their favourite *arsenic* is the most celebrated.

"This plan of cure (remarks Dr. G.) is so excellent, that in treating the disease, we may safely take it for our guide, modifying it slightly, however, to make way for the improvements of modern medicine."

The *third* paper is an account of a Case of Abscess in the Coats of the Bladder, by J. Davidson, Esq.

"Hussain Ali, a stout middle aged man, addicted to the use of opium, but otherwise of regular habits, applied for relief at the Pilgrim hospital on the 20th November, 1832, on account of retention of urine, which he stated to have come on gradually, but that no urine had been expelled for two days. He was in great pain from the distended bladder, which was felt above the pubis, very large and hard, and there was an œdematous swelling of the penis and scrotum. Finding some difficulty in introducing the common catheter, Mr. D. used a straight pewter one, and easily succeeded in drawing off a very large quantity of very fœtid urine. Ordered a purgative, and hot fomentations to the perineum and pubis, and a composing draught at bed time. In the morning he was much relieved, and for several days continued to pass his urine pretty copiously, but with gradually increasing pain and difficulty; this seemed attributable to a swelling just above the pubis, which, notwithstanding the application repeatedly of leeches, and cold applications, continued to increase in size fourteen days, at which time it was as large as a goose egg, hard and puffy; the swelling had extended to the penis, and the urethra appeared obstructed by it, so that he could not pass his urine for several hours. He was in great pain and very irritable with fever, and complained that unless he were relieved from his sufferings he could not live through the night. Mr. D. found the swelling still hard, but thinking there was an obscure sense of fluctuation at the most depending part, he made an incision of a couple of inches in length, and one and a half in depth, which gave immediate relief, and was followed by the discharge of about eight ounces of fœtid pus and sloughs. In about an hour he was able to expel his urine by the urethra, but during the ensuing night, discovered that it was also discharged by the wound above the pubis. This discharge of sloughs and urine, mixed with pus, continued for upwards of a month; during the early part of which time, he suffered from fever and bowel complaint, but these were soon cured by the usual remedies; after which, by the use of vegetable tonics and soda, and opium at nights, with generous diet and brandy, the abscess put on a healthy appearance, the sloughs gradually ceased to be discharged, and on the 10th of December he was dismissed, the abscess being quite healed up, and his health good in every respect, which it has continued to be up to this time, January 9th, 1833."

The *fourth* article is on the Pathology of some of the Diseases of the Abdominal Viscera, by C. Morehead, M. D.

This paper comprises a number of interesting cases of abdominal diseases with pathological remarks. Its character is such, however, as to prevent the several points to which the remarks of Dr. Morehead have particular reference, from being presented in a satisfactory manner, unless the cases to which they are appended be given in extenso, and this our limits will not permit.

The subsequent article is a detail of Cases of Chronic Dysentery treated with Sulphate of Copper and Opium, by W. W. Raleigh, Esq.

Mr. Raleigh has endeavoured to collect some distinguishing signs whereby to decide on the time and state of the disease at which we may expect advantage from using the sulphate of copper and opium; and although he is not prepared to offer any positive rule for the guidance of the practitioner, he thinks that he has found this combination most beneficial in cases where the evacuations were of a pultaceous or pulpy consistency, as if in a state of fermentation, and where they were fluid and of a pale colour. In those instances in which a mahogany or beet coloured tongue has been a remarkable symptom, he has invariably found it to be of great service; as also where the tongue has been unnaturally deficient in colour and soft in texture. Tenderness and soreness in the

course of the colon, if not acute, as where the disease has been of long standing, constitute no objection to the administration of the remedy; but where these symptoms are accompanied by evacuations of a bloody mucous description, which are the positive indications of high inflammatory action, Mr. R. presumes, that in India, at least, it would be hazardous to pursue any other than an anti-phlogistic course of treatment.

In cases subjected to the treatment by sulphate of copper and opium, there is, we are told, after a time, a disposition to indolence on the part of the intestines, and deficiency of the natural secretions of the bowels; the fæces become of rather a clayey consistence, and are not freely carried off. Mr. R. has, therefore, found it advisable to administer occasional mild laxatives, but only in such quantities as are considered just sufficient to unload the canal, without producing purging. Castor oil, infusion of senna, and sulphate of magnesia, or sulphur, have usually the desired effect, without irritating the bowels; and an enema is often of advantage. A course of mild alteratives at night, followed by a chalybeate in the morning, is sometimes required to restore the regular action of the alimentary canal after the dysenteric affection has been cured.

"During the use of the sulphate of copper, where there is soreness on pressure at the cæcum, or any part of the colon, the daily application of a few leeches, followed by counter irritation, very much assists in the cure. In delicate persons, the use of a stimulating liniment, or the emetic tartar ointment, continued so long only as to produce redness of the cuticle, is preferable to the more severe effect of the emetic tartar plaster, until pustules are occasioned, or the common blister, and is never objected to by the patient."

Mr. R. administers the sulphate of copper in the dose of from a quarter of a grain to a grain and a half, combined with from half a grain to a grain of opium, repeated three times a day.

The sixth article is on the Pendulous Tumour of the Ear, common in Nipal, by M. J. Bramley, Esq.

The affection consists in one or more encysted tumours, apparently arising from, or situated on, any portion of the *pinna* or external ear; most commonly both ears are affected, and it is not uncommon to see six, seven, or even more of these tumours in one individual. The most common spot for the development of the tumour is the *lobulus*, particularly when there is but one; when, however, there are more, they are found indiscriminately attached to every portion of the fibro-cartilaginous plate of the ear. Men, women and children are alike subject to this tumour.

A curious feature in the history of this affection is, that it appears to be confined to the inhabitants of a certain part of the valley of Nipal, a small village which, with its environs, occupies about one square mile. In respect to the manners, customs, and diet of the inhabitants of this village, they are in all respects the same as those of other parts of the great valley in which it is situated.

The disease rarely, if ever, produces any constitutional disturbance, and as it attacks exclusively the laborious classes, it is usually left to take its own course. Its chief disadvantage is the extraordinary deformity it occasions, for whether the disease is matured or not, its growth, from the commencement, is so rapid, that a tumour of two months standing can seldom escape common observation, being then often the size of a pigeon's egg. At this time it appears to be nothing more than a common encysted tumour, containing a white curdy fluid. It is moveable with a broad base. Sometimes the skin is discoloured, assuming a bluish hue, and studded with a net work of minute vessels; in such instances, the tumour is painful on pressure, and more remarkable for the rapidity of its growth than where the skin retains its natural appearance. In some

the tumour is soft, in others hard, with little alteration in the above appearances; its size continues to increase, till at length the base detaches itself from the cellular tissue from whence it emanated; the ear is then drawn downwards, or otherwise displaced, by the weight of the tumour, which now becomes pendulous and generally ovate shaped. These appearances may, or may not, be preserved for a series of years, but it more commonly happens that the cyst loses its uniform firmness and elasticity, by which the shape of the tumour becomes altered. The tumour finally loses entirely its elasticity, and becomes soft and flabby to the touch, considerably diminished in size and retaining little or no trace of its former shape. This is almost the invariable appearance at an advanced period of life, though in some middle aged persons, one or two tumours may have reached this stage, while others are less advanced. The disease cannot be said to have run its course, till the whole of the contents of the cyst are absorbed; when nothing remains but a shapeless mass of thickened integument, which, from being now and then pectinated at its edge, adds to the ludicrous appearance, while the attachment of the morbid growth is now so loose that it moves to and fro, in conformity with the ordinary motions of the body.

The difficulty of arriving at any conclusion as to the probable cause of this singular affection is obvious. The natives themselves consider it to be wholly attributable to some impurities in the water which they drink. It is quite certain, according to Mr. B., that the disease has no connexion with goitre, since many instances may be seen, where these diseases arise independently of each other, though many may also be found in which both diseases exist in the same individual; animals are not subject to it, as they are to goitre. Women and girls are more commonly affected with it than men.

One striking distinction between these tumours and ordinary encysted tumours of other parts of the body is the rapidity of their growth.

The next paper is on the Numerous Cases of Apoplexy, which occurred during the Hot Season of 1833, at Chunar, by A. K. Lindesay, Esq.

It appears that the hot season of 1833 commenced early and continued long. Towards the end of May, when eighteen days of easterly wind had been succeeded by a searching west wind, before the European residents became seriously affected, sudden deaths among the natives were daily reported in considerable numbers. From all Mr. L. could learn, most of these last dropped down dead, some at their usual labours, some after exposure and excitement during the Moolhurrim, and others in their houses, without any apparent illness, or any premonitory symptoms. At last it began to attack the Europeans, and in the course of the month of May and June, but chiefly from the end of May till towards the end of June, seventeen cases of apoplexy had proved fatal among little more than two hundred men. The young, the old, the drunken and the steady—those habitually exposing themselves and those who were careful—were indiscriminately attacked; in almost every case the accession was sudden, and in only one case was one side of the body more paralyzed than the other.

Mr. L. presents the abridged details of twelve cases, in which the disease was seen during life, and the body inspected after death; five others from being complicated, or equivocal, are simply glanced at.

In all these cases, very evident disease of the brain is indicated, as well by the symptoms during life as by the autopsical examination of the head after death. Some of them we should hardly consider as presenting, however, the distinguishing phenomena of apoplexy. In the only instance in which paralysis was present, it is stated that "the substance of the brain was throughout without a trace of disease."

"I do not mean," remarks Mr. L., "to indulge in speculating on many interesting points suggested by the pathology of some of the above cases; such as the proba-

ble influence of the organic disease, or temporary congestion of the thoracic or abdominal viscera predisposing to cerebral affection; or the likelihood of chronic arachnitis being present in many of the cases, for the thickening and whiteness of the arachnoid membrane must be supposed the effect of disease of much longer standing than that which caused death; also some of the cases militating strongly against Dr. Clutterbuck's doctrine of absolute incompressibility of the cerebral mass, for the arteries were minutely injected, the veins at least as full as in health, and yet no small quantity of serum was added to the cranial contents.

"I may add, that during the time of these cases occurring, there was a tendency to affections of the head in many other individuals; and I am willing to believe, that, as attention was minutely paid to all such cases, many were saved from the convulsive attack *from which none recovered*. In such cases, local and general bleeding, cold to the head, friction of the surface, blisters of caustic or cantharides, and the quiet and temperance insured by hospital discipline, were the means which, I suppose, averted more serious evils. In some cases headaches were obstinate; in one, partial deafness still remains; in some, the pupils continued long closely contracted; in one, they are still constantly dilated, whatever the degree of light; in others again, as soon as the threatening symptoms had passed away, perfect health was speedily re-established: in short, the lesson taught to me has been '*venienti occurrere morbo*'—once seized, I have never saved a patient."

The following paper is on the Pathology of Dysentery. By J. Murray, Esq. Mr. Murray, in presenting his views of the pathology of dysentery, is persuaded, that, notwithstanding they differ materially from those of distinguished writers upon the disease, that this is to be accounted for, not by presuming the inaccuracy of all former observations, but from the superior advantages which he has enjoyed for observing the morbid appearances in the earlier stages of this affection. The cases from which the observations of Mr. M. are drawn occurred in a detachment of artillery drafts proceeding by water from Dum-Dum to the upper provinces. During this period, cholera broke out, and to its attack the dysenteric patients were particularly predisposed; and by it many of them were destroyed, at a period when the morbid changes connected with the dysentery were of themselves insufficient to produce fatal results. The dysenteric symptoms under which these patients laboured correspond with those described by the best writers on the disease as it occurs in India.

The post-mortem appearances, as detected in six cases of dysentery, are presented in the paper before us.

"In these cases," Mr. M. remarks, "the morbid appearances of dysentery may be traced from the first organic lesion, through all the different stages, to a return to the healthy structure. The disease appears to pass through a regular course, which may be separated into six distinct stages, viz.

"1. Inflammation, or vascularity and thickening of the coats of numerous portions of the colon."

"2. Effusion, or the formation of numerous vesicles, with the subsidence of the inflammatory action."

"3. Gangrene, or inflammation of the coats surrounding the vesicles or pustules, leading to their death, to an extent proportioned to the severity of the inflammation. The proofs of this stage are very clear, and the examples diversified, from a line and a half in diameter, the size of a common pustule, to three or four inches, involving the whole calibre of the intestine. This latter extent is evidently produced by the confluence of several pustules. The shape of extensive sloughs, in most instances, would indicate this mode of formation."

"4. Ulcerative inflammation, or the absorption of the surrounding coats, with the separation of the sphacelated portion."

"5. Granulation, or the formation of a new healthy vascular secreting surface."

"6. Cicatrization, or the contraction of the surface of the ulcer, and the formation of a new epithema."

"The progress of the ulcers in this disease bears a very close analogy to those of pustular diseases on the surface of the body, where the surface is kept moist, and



the formation of crusts prevented. In both cases they appear simultaneously, in great numbers; and several stages may in both be found at the commencement. The one is said to originate in the rete mucosum; the other commences in the vascular and nervous coat immediately under the epithema—probably in the glands of Brunner and Peyer. In both, when slight, the pustules are distinct, and no permanent marks or cicatrices are left; but when severe, the pustules are frequently confluent, and indelible cicatrices remain. In both, aggravation of the inflammation, with extension of the sphacelation, takes place, from the contact of irritating vitiated secretions, and in both, hæmorrhage from parts subjected to motion. The one is confined to the surface of the body, exposed to the action of the air, while the other is confined to the surface, not exposed to its action, and apparently only to a portion of that surface, viz: the colon. From these facts, in my opinion, the following inference may be legitimately drawn, viz: that dysentery is of the pustular order of exanthematous diseases."

The *ninth* paper is an account of Cases of Fracture of the lower Extremity. By W. W. Raleigh, Esq. These cases do not admit of condensation.

The paper following is On Goitre. By J. McClelland, Esq., being a series of conclusions derived from investigations into the nature and cause of that disease in Kumaon, with a view to its prevention and cure. From these conclusions, it appears that goitre is not found, in primitive districts, where limestone does not exist as a principal rock formation, or if found there, it is only in the proportion of one to five hundred of the population; while in transition and fletz districts, where limestone prevails, one seventh of the whole population are affected with goitre. In the latter districts, the population are not equally affected in every village; but one village is affected in the midst of others which are healthy, and vice versa.

According to Mr. M'C., goitre does not depend on temperature, altitude, or aspect of irregularities on the surface of the earth, on hereditary taint, nor on the usual causes of glandular enlargements in other parts of the body. Those villages in which goitre exists, are always erected on, or in close vicinity to great limestone formations; and where the water is furnished, for the use of the inhabitants, by springs which are derived from limestone rocks. No instance to the contrary has occurred to Mr. M'C., though his observations have been extended over the space of nearly 1000 square miles, and conducted by himself in person, without a view to the support of any particular theory. It appears that the morbid principle in the water is removed, or modified, according to the distance it runs in channels of alluvial earth, impregnated with animal or vegetable matter, before taken for use. Goitre is found to affect both sexes indiscriminately; children are exempt from it, until the age of three years.

In villages where goitre prevails, it is not usual for the lower animals to be affected by it, and as no instance of the kind has occurred to the notice of Mr. M'C., he concludes that the tumours observed by others on the necks of animals, belong probably to a distinct disease.

The lowest caste of persons, who are generally slaves of the higher orders of Hindoos, are more subject to the disease than their masters, who are less exposed to the noxious influence of the water.

"With respect to the treatment of goitre, the only part of it that it is necessary here to allude to, is the necessity of changing the accustomed water, and to substitute for it the water of a spring known to be wholesome. This is better decided by the appearance of persons who have used it for a long time, or by the absence of limestone from the spring, than by any chemical analysis." "The change of the accustomed water is, therefore, the first thing to be recommended, and it is often the only thing that is necessary."

The subsequent article is Observations on Elephantiasis. By T. A. Wise, M. D. These observations extend over forty-nine pages, and although extremely interesting and calculated to throw considerable light upon this strange affection, we shall be under the necessity of passing them by, without attempt-

ing to present to our readers a view of the leading points embraced in them. A satisfactory analysis of the paper would occupy far more space than we can at present spare.

The *twelfth* paper is entitled "Notes on a New Injection for the Cure of Hydrocele. By J. R. Martin, Esq." The new injection proposed by Mr. Martin, is a solution of the tincture of iodine, in the proportion of two drachms to six of water, of the ordinary temperature. The effects of the iodine solution, we are told, seem to be immediate, the inflammation arriving at its height in about twenty-four hours, and after that subsiding rapidly. In only two instances was bleeding by leeches found necessary. Poultices, cold lotions, and purgatives generally constituted the treatment; and even these were not had recourse to in a large proportion of the cases. The cases in which the iodine injection was used, for the sake of brevity, are arranged in a tabular form. They amount to ninety-five.

The advantages of the iodine injection, according to Mr. Martin, are as follows—

"1st. It is altogether free from the danger to life so frequently occasioned by the former operation of injection with wine solution.

"2nd. The cure is effected in from three to five days, in place of from fifteen to twenty-five.

"3. The operation is greatly simplified, so much so, that any person at all acquainted with the anatomy of the parts, may operate; and the injection being so small in quantity, and, what is more important, retained—infiltration is next to impossible."

The next article is Descriptions of Some Rare and Curious Plants. By N. Wallich, M. D., &c., which is followed by a paper by W. B. O'Shaughnessy, M. D., on the Existence of a New Principle (sub-rubrine,) in Human Blood, in the Healthy and Diseased state, and in the Blood of several other Mammalia.

The doctor, in making an experiment to ascertain the amount of colouring matter in 1000 grains of spleen blood, being pressed for time, adopted a mode of analysis calculated to afford more expeditious results than the one he was previously in the habit of employing "It consisted in decanting the serum, and depriving the coagulum of its fibrin, by kneading it in a muslin bag. Alcohol was then added with a view to coagulate and throw down the colouring matter and adhering albumen. The precise amount of this albumen being readily known by data afforded by the analysis of the serum, the amount of pure colouring matter can thus be precisely computed." When the alcohol was added, and the coagulation effected, the doctor threw the mixture on a very fine muslin filter; "a very turbid fluid immediately passed through; supposing that the flakes were merely imperfectly coagulated colouring matter, he boiled the turbid fluid, in order to accelerate the separation he expected. To his surprise, however, instead of this effect, the very contrary was produced. The heated fluid, instead of coagulating, became more transparent, and all the turbid flocculi were dissolved when the boiling point was attained. Allowed to cool, the solution again became cloudy, and when at 80° Fahrenheit, a copious deposit, of a faint flesh colour, was obtained. By alternate heating and cooling, whether gradual or sudden, the same effects were indefinitely produced. A portion was filtered, and the flaky substance dried, in which state it was soluble in diluted alcohol, infusible when heated on platinum foil, and insoluble in sulphuric ether."

To those practically conversant with this department of animal chemistry, the doctor conceives that the preceding facts afford of themselves the strongest evidence of the existence of a principle previously unknown in the blood under examination. To others he thus explains the proofs of the speciality of the principle in question.



"1. The *animal* principles previously known to exist in human blood, were fibrin, albumen, oil, a compound of albumen and soda, traces of urea, and the red principle, called by some *hematosine*, by others simply colouring matter; and which I think should be termed *rubrine*, in conformity with the radical source from which the names of the other principles have been derived.

"2. The substance noticed in the above experiment could not have been fibrin, because all the fibrin had been previously removed.

"3. It could not have been albumen, as albumen is coagulated permanently by heat and by alcohol, separately or conjointly; whereas the new substance is soluble in diluted alcohol in the boiling state.

"4. It could not have been urea, for urea is soluble in hot and cold alcohol and water; but the new principle was precipitated as its solution cooled. The same remark applies to the albuminate of soda, and from this substance it was still more unequivocally distinguished by numerous other properties, which I shall subsequently detail.

"Lastly, it could not have been the oleaginous matter, as this ingredient of the blood requires very strong and hot alcohol for its solution; is fusible by heat, and soluble in cold sulphuric æther. The new principle is soluble in diluted alcohol, *infusible when heated* in the dry state, and *totally insoluble in sulphuric æther*, at any temperature."

The doctor ascertained by numerous experiments, that this new principle is of universal occurrence, in health and disease, in the Indian and European, and in all conditions of age and sex. He has also detected it in the cow, horse, goat, sheep, jackal, fox, and dog. The average quantity in 1000 parts of blood, was found to vary in amount from 10 to 15 grains:—thus exceeding considerably the amount of fibrin, and ranking next in proportion to the albumen.

In the dry state it is opaque, pulverulent, of a reddish-brown colour, totally infusible by heat, leaving a very minute earthy residuum when calcined on platinum foil or mica, insoluble in absolute alcohol or distilled water, when cold; insoluble in æther or the oils, fixed or essential, but soluble in diluted alcohol, at the boiling point, and again deposited of a faint flesh colour on cooling; redissolved instantly by the addition of nitric acid, in the proportion of one drop to 1000 of the mixture, and the solution rendered turbid by ferro-prussiate of potassa and tincture of galls; unaffected by currents of oxygen, hydrogen, nitrogen, sulphureted hydrogen, and carbonic acid gas.

The doctor was unable, from the want of apparatus, to obtain the ultimate analysis of this new principle. In regard to the relations which exist between it and the other well known animal ingredients of the blood; he remarks:

"In the first place, while it differs remarkably from the colouring matter, or *rubrine*, and from the *albumen*, we still find it participating in some of the properties of each, to a degree, that establishes a certain affinity among the entire. While it differs from the *rubrine* in its relations to heat and its solubility in diluted alcohol, it nevertheless resembles it strongly in the most important and peculiar of its properties, namely, the *red colour*. Again, while the new substance differs widely from albumen, also, in the mode in which they are affected by heat and alcohol, it still exhibits the same reaction with the tincture of galls, ferro-cyanate of potassa, some of the acids, the alkalies, and with the gases I have above enumerated. Thus, while on the one hand we establish the essential differences between the three substances, we trace their analogies on the other. We find a resemblance sufficiently strong to warrant us in deeming it highly probable, that in the wondrous laboratory of the living frame, this new principle exemplifies the concluding stage in the hitherto obscure process of the complete reddening of the blood. An additional and important step, it is highly probable, is thus added to our knowledge of the various changes which occur, from the time that the digestive transmutation of aliment commences until the change is consummated by the formation of blood. Dr. Prout first showed imperfectly formed or 'incipient albumen' in the contents of the duodenum and jejunum. The researches of other chemists pointed it out when fully formed in the thoracic duct. The colouring

matter, too, we may trace in the pink coagulation of the chyle, but it is still imperfect, requires elaboration in the lungs, and in point of fact, as I have ascertained by experiment on the dog, is chiefly composed of the new principle;" to which the doctor conceives that he has acquired a sufficient amount of evidence to warrant the application of the new term *Sub-rubrine*.

The *fifteenth* article is a Case of Beri Beri, with Pathological remarks, by J. Mouat, M. D.

This case, the details of which it is not necessary to give, is remarked by Dr. Mouat to have possessed too many of the symptoms usually considered pathognomonic of the beri beri of India to be separated from that peculiar and distressing malady. The disease under which the patient laboured bore, at the same time, nearly, if not all, the characteristic symptoms of phlegmasia dolens, as detailed and illustrated by Dr. R. Lee, in his valuable papers on that subject. Indeed, so far as a solitary case can confirm, the dissection in this instance, would tend to the supposition, that these two diseases, if not identical, are at least so nearly allied, as to entitle them to be classed under the same head; though, perhaps, different in species. Dissection discovered, in the case related, considerable lesion of the venous system, particularly of the left lower extremity, which was the one affected with the disease. The femoral and external iliac vessels of that side were very much contracted. The femoral vein was very small, and in several portions was nearly obliterated, by being plugged up, apparently by an organized substance in layers, adhering to the vessel, of a brown ochry colour, very similar to the substance observed in aneurisms, where nature attempts a cure. The vessel was diseased to about six inches below Poupart's ligament, and the disease extended into the external iliac to about an inch below the formation of the inferior cavæ, and this portion seemed flaccid and contracted like a piece of tape. The lower portion of the cavæ also seemed smaller than natural; at the junction of the external and internal iliac, there was a clot formed, but not organized. The vessels were closely united together, and enveloped in a quantity of brainlike fat, a good deal of which appeared in various parts of the body. The internal coat of the femoral vein in parts, was thickened, in others, as if inflamed. The interior of the arteries presented nothing remarkable, and the dissection was not made more than nine or ten inches down the thigh.

Dr. M. remarks, that even though future observations should disprove the connexion of the beri beri with phlegmasia dolens, yet a parallel of the two diseases will tend to establish, what is very important, a general constitutional disturbance, accompanying or arising from a local affection, analogous to the latter disease, agreeing with it in its progress, general history, and pathology, though it is to be presumed, excited by a totally different cause.

The next paper is by the late W. Twining, Esq., presenting Some Account of the Fevers which prevailed in Calcutta in the year 1833. From this very excellent and strictly practical paper we shall merely present one or two extracts. To attempt to condense it would be neither doing the author justice nor benefiting our readers—the article must be read entire to derive from it the valuable hints it is calculated to afford.

During an unusually oppressive hot season, more particularly during the months of April and May, there occurred no remarkable increase of sickness in Calcutta. The common inflammatory fever, however, frequently occurred, "and its worst cases appeared among those who were exposed to distress, fatigue, and privations, during the gale of wind and inundations which happened about Diamond harbour and the vicinity, on the 22nd of May. The local affections attendant on these fevers were for the most part referrible to the head and stomach; in some cases acute inflammation of the liver was present, and affections

of the spleen were observed during the course of the disease, but more especially towards its termination."

In those cases in which the symptoms of gastric affection were predominant, with morbid tension at the præcordia, and pain on pressure, attended by sickness and vomiting, besides the use of the lancet, frequent applications of leeches to the region of the stomach were required; and after the arterial action and morbid heat were subdued, a degree of irritability of the stomach occasionally called for the employment of a blister.

"In those cases, in which the gastric affection was predominant, the frequent use of drastic purgatives was avoided, and after the bowels had been thoroughly emptied by an effectual dose of senna mixture or jalap, mild aperients are ordered only where any evidence of accumulation in the bowels existed; and when enemata could be made to procure evacuations, other means were avoided. Under the existence of much gastric irritability, the frequent employment of strong purgatives is apt to produce flatulent distension of the belly, to increase gastric irritability, and not only to fatigue the patient by causing frequent efforts to stool, but sometimes repeated watery evacuations, especially after saline purgatives, are apt to be followed by dangerous exhaustion, more or less allied to the collapse of cholera."

"I would beg leave," says the author, "to say a few words relative to those severe cases of continued fever, as well as remittent, in which active treatment was not commenced early, or where, from particular violence of the disease, local inflammations and congestion could not be subdued by the lancet, aided by leeches and purgatives. A degree of local disease of the most dangerous nature, is then liable to take place. I allude to the sero-albuminous effusions from the capillary vessels, which take place between the tunica arachnoidea and pia mater, at the top of the hemispheres of the brain, as well as at its base, and in the spinal canal between the arachnoid and dura mater. Similar effusions also occur at the root of the mesocolon, and in the cellular structure about the duodenum. These effusions sometimes seem to coincide with the natural subsidence of active pyrexia, and a material change in the patient's condition; which change is of an unfavourable character and too often proves the precursor of death. In those cases where the effusion has taken place in the cellular structure about the duodenum, or at the root of the mesentery or mesocolon, there is usually much anxiety, and prostration of strength, with some fulness of the belly. When the cerebral effusions occur, there is more or less of stupor and indifference, although the patient often answers questions correctly; he lies on his back with the limbs stretched straight, or he slides towards the foot of the bed; the face is often pale, and the pulse slow and soft, or the cheeks slightly flushed, and the pulse quick and weak; the pupils are usually small, and the morbid heat moderate, if not subdued. In the latter stages, the hands are often put forth to grasp some imaginary object. When a patient is approaching the state above described, the only chance of saving life, is by the free administration of mercury; if the patient be not already salivated, 12 grains of calomel, or the same quantity of blue pill are to be given three times a day, and if any degree of morbid heat remain, four grains of antimonial powder are to be added to each dose. If there be not a free stool once a day, it is requisite to give a small dose of jalap, with cream of tartar, once in thirty-six hours; but if there be little or no morbid heat, and a watery purging exist, it is often necessary to combine some opium, or some hydrarg. cum creta, with the calomel, and use mercurial frictions. Small quantities of cream of tartar and sp. æther. nitros. added to the drink, are also often of service, by acting as diuretics. In these cases, the frequent administration of purgatives is injurious, by preventing the due action of mercury; and active purging is apt to bring on a tympanitic state of the belly, which must be regarded as a most dangerous symptom, when induced by purgatives, at this stage of the disease."

The succeeding paper is entitled "Observations on Dracunculus." By A. Duncan, Esq.

Mr. Duncan has ascertained, by the microscope, that the white matter, like thick cream, filling the inner tube of the dracunculus worm, is a mass of living young ones. "It requires dilution to permit them to be distinctly examined.

They are very lively—He measured many of them, and found them to be about the fifty-seventh part of an inch in length, somewhat like in shape to the tadpole of a mosquito, but *much*, very *much* smaller, and more slender in proportion to their length; fully a third consists of a fine extremity like a string; they swim after the head, but can fix their slender extremity to an opaque substance, and work the body to it. They have a dark line, in some two, running along the length of body. He suspects it is always two, but approaching so near, that from their rapid motion he could not always make it out. When disturbed they coil themselves up, as a snake does, and lay as if dead for a short space, then cautiously unroll themselves, and begin to play again." Out of, he thinks, two worms, the young ones had double tails, which they separated and reunited with great rapidity; in the latter state they appeared exactly as one; these were rather thicker in the body than the others.

It is said that the dracunculus is separately male and female. Of this Mr. D. is unaware; all the large ones that he examined were full of young ones; the small ones he took to be imperfectly grown.

The conclusions to which the author has come, on the subject of dracunculus, are:

"1st. That when the time of producing its young has arrived, it then exerts itself to get out of its nidus.

"2nd. That the young are capable of fixing themselves to an appropriate substance, and working themselves into it.

"3d. That the period of growth from the animal's birth to the procreation of its young is somewhere about twelve months.

"4th. That the irritation produced by a broken worm is to be mainly attributed to the young ones. If it be said, that it is extraordinary that of such a multitude of young ones so very few should live in the human body, I can only admit the fact, and conjecture that the chief cause of their destruction is the excessive suppuration caused when a number of them escape internally. I have examined the purulent matter of many of these abscesses, and found the young animals sufficiently plentiful in it, but I do not know that I ever found any alive, or at any rate I found none in the lively state they exist in other circumstances; hence I suppose pus is an improper vehicle for them to live in, and that the extensive suppuration is a means to prevent their excessive multiplication in the body, and, when externally, the parts around are in a state of inflammation."

*Article eighteen.* On Epidemic Diseases, which occurred at Bangalore during the year 1833. By T. Mouat, M. D.

The epidemic diseases principally treated of by Dr. Mouat, are the influenza and cholera. His remarks in relation to these affections are interesting; but as they offer no very striking or novel points either in regard to their nature or treatment, and our space being limited, we shall not attempt to offer an abstract of the paper.

The ensuing paper by T. E. Dempster, Esq., On the Climate of Van Diemen's Land as a Resort for Invalids from India, we pass over, as interesting chiefly the physicians and inhabitants of the latter country.

*Article twenty* is entitled Observations on the Fever which Prevailed at Howrah during the months of June and July, 1834. By Duncan Stewart, Esq., M. D.

"Of the early fever cases," says Dr. S., "those, namely, which occurred about the middle of June, after the first rains, the greater part were continued, distinctly referrible to some error of diet, exposure, or cold; coming on abruptly with a chilliness, pain in the back, loins, and knees, followed by nausea, headache, hot skin, thirst, &c. In five cases the head seemed to suffer most: one of these was characterized by a pulse, which for three days did not rise to sixty, there was no flushing of the face, redness of the eyes, headache, nor hot skin, but a great unwillingness to speak, a slowness of answering, and apparently of comprehending questions: intolerance of light and obstinate costiveness. In a second, the pulse continued at eighty; there was little or no heat of body, a clean tongue,

and not much thirst; the cerebral symptoms were drowsiness, continued pain in the back of the head, and intolerance of light and noise. Of the other cases of continued fever, the principal determination seemed to be to the mucous membrane of the bowels, and to the liver; the secretions of these organs being irregular, and of a highly irritating sort, causing perpetual nausea and fatiguing retching; the pulse was generally quick and hard, the heat of the body pungent, the tongue dry and pointed, of the colour of an old brick, with red edges, and not becoming furred with any brown or thick mucus until the third day, when freer secretion had re-commenced. In all these cases, venesection was freely and repeatedly employed at the commencement, followed by scruple doses of calomel immediately, and then by doses, night and morning, of ten grains of calomel, and fifteen grains of colocynth, with a purge of compound powder of jalap at noon; leeches and blisters were useful towards the end of the case; the tepid bath, in cases of much gastric irritation, was found very beneficial, and the cold dash on the head had a most soothing influence. The most remarkable circumstance, at that time, which fell under my notice, was the proclivity to cholera; one lady was attacked with it at two o'clock in the morning, after taking the night before, of her own advice, five grains of calomel and four of James' powder; and another seemed to threaten cholera, from the use of infus. sennæ and infus. rhei with a little epsom salt. I, therefore, in almost every case, combined opium grains; with each dose of calomel and colocynth, and never found it to interfere at all with their operation; on the contrary, the soothing effect of the opium on the irritable fibre, was such, as will induce me in future to make a freer use of that powerful drug, than I have been accustomed to do. None of these cases could bear quinine during convalescence. The minutest quantity of it, given in any way, produced deafness, noises in the ears, and tightness across the eyes. Fortunately, none of them required tonics, and all recovered well and rapidly."

"From the 10th of June onward, daily new cases of fever occurred, which for four or five days, at first presented no peculiarity sufficient to characterize them. The patients themselves complained of an 'inward heat,' of general indisposition, loss of appetite, want of sleep, occasional flushings and chills. The tongue was always white or pale, and the bowels out of order, generally costive, and the stools of a paler colour than natural. There being an evident deficiency of the biliary secretion, these cases were usually treated with two pills, at noon, at six P. M. and at bed time, viz. *R. pulv. jacobii gr. ij., calomel gr. iv., colocynth. ex. gr. vi.* in two pills, and a dose of *pulv. jalap, comp. castor oil or sennæ* in the morning. These remedies certainly cleared the bowels effectually, but did not always restore healthy secretion. On the contrary, the evacuations were generally at first pale and feculent, then green and watery fæces, then olive coloured mucus; then dark slimy, pasty, or frothy discharges; then pure bile, mixed with the appearance like chopped tea leaves; but about this time, that is, after the fifth or sixth day, a morning rigor occurred at ten A. M., followed by a hot fit, and a sweating stage towards five in the evening—a night paroxysm came on *without shivering* at nine or ten P. M., and lasted till three or four o'clock, A. M. Next day, one hour earlier than on the former, the shivering again occurred, and the hot fit and evening paroxysm as before. A third paroxysm was usually prevented from coming on the next day, by large and full doses of quinine, but its period was marked by slight heat of the hands and head, and the use of quinine was intermitted until the period was over, and again resumed at four P. M. In none of these cases, some of which were very severe, and followed by long and great depression, did any such symptoms present themselves, previous to the first well marked rigor, as seemed to call for depletion; but during the first fit in all of them, I am persuaded that the liver was relieved greatly, and a more perfect remission obtained, from the employment of eight or ten leeches, the bites of which were allowed, by the help of a poultice, to bleed freely after their removal. The previous free purgation by colocynth and calomel had likewise left the bowels so clear, and as far as their functions was concerned, so quiescent, that full doses of quinine, i. e. two or three grains in solution, were borne every hour with perfect safety, the moment the fever-paroxysm had subsided; although at this time the liver was pouring out ounces of perfectly black bile, which passed along the bowels, and was discharged for several successive days, at this stage of the fever, perfectly fluid and clear, without a shred of mucus or an atom of fæces. As soon

as these free discharges of bile commenced, calomel was laid aside for quinine, and a gentle stimulus supplied to the bowels, pulv. jalap. comp. or senna and manna, daily. In a few days more the stools changed their appearance to a healthy brown colour; and in females the first and most unfailing symptom of returning health was the reappearance of the catamenia."

Observations on Land Scurvy, by I. Hutchinson, Esq., is the title of the *twenty-first* article. This paper does not present any thing particularly interesting.

The next article is a Case of Fracture of the Trochanter. By J. Clarke, Esq.

A muscular man aged thirty-two years, of intemperate habits, while running along a sloping pavement was thrown down with great violence, and fell with the whole weight of his body on the left hip and thigh. He was stunned by the fall, and felt unable to rise, but upon being assisted he walked a few paces to get into a house, supported by a man's arm. When seen a few hours after the accident, there was considerable swelling with slight contusion over the great trochanter, and the parts about the hip joint were tense and painful. He lay in bed with his limb fully extended, and there were no symptoms indicative of either dislocation or fracture of the femur; but on raising the foot and rotating it inwards, he shouted in agony, the pain shooting from about the trochanter along the bone to the knee, in which joint the pain was most excruciating. Suspecting that a fracture had occurred within the capsular ligament, both limbs were placed in accurate apposition, but not the slightest deformity or shortening could be detected. The trochanter described a naturally large circle on rotation, and no crepitus could be felt—the foot fell slightly outwards, but not more than would occur in a limb in which the muscles had been much bruised. Leeches and fomentations were applied to the injured part, and the limb was kept extended and supported by small pillows placed under the outside of the knee and ankle. The inflammation and swelling subsided, but the pain on rotation was so excessively severe, being referred as before principally to the knee, and extending along the bone, that Mr. C. felt convinced the bone was injured, although the nature of the injury was ambiguous—pressure on the hip and trochanter did not give much pain. Seven days after the accident the patient was attacked with delirium tremens, and died the next morning.

"On opening the articular cavity (of the hip) reddish coloured synovia escaped; the round ligament was healthy, but more vascular than usual; the neck of the bone was uninjured; the bottom of the acetabulum was of a deep red, showing that the head of the bone must have been forced with great violence against it; hence the pain felt in the knee, as is usual in inflammation of the hip joint. Extravasation was discovered within the capsular ligament, and around the trochanter major; and on clearing away the muscles, the trochanter was found crushed and shattered, several pieces entirely detached, and fissures extending deeply into the shaft of the bone. The cells were filled with coagulated blood, and no attempt at reunion or reparation had taken place."

On examining the bone after maceration and drying, it was found that a fracture of the bone through the trochanter had taken place, but without displacement.

Article *twenty-three*. Cases of Lithotomy on Asiatics. By R. N. Bernard, Esq. A notice of this paper would not be particularly interesting to our readers.

Article *twenty-four*. Further notes on the Cure of Hydrocele by Solution of Tincture of Iodine. By I. R. Martin, Esq. All the cases in which this solution has been used as an injection, have terminated successfully, as far as could be ascertained, even those who underwent labour and fatigue from the moment of the operation, have done well, so that the safety and expedition of this plan of cure would seem to be established. In this paper the author calls attention to twelve cases of double hydrocele, treated *on both sides at once*, and which recovered with quite as much ease and expedition as the single cases



From the facts set forth in the present article, Mr. Martin considers himself warranted in drawing the following additional corollaries:

"1st. The operation with tincture of iodine solution is greatly less liable to failure than that with port wine solution.

"2nd. No serum has ever been reproduced a few days after the operation, with iodine solution.

"3d. Care in the after treatment, upon which so much depends in the old operation, would seem here to be little requisite."

*Article twenty-five.* Account of an Aceto-Spirituous Tincture of Cantharides. By D. S. Young, Esq.

The substance of this and the two succeeding papers on the same subject, was noticed in our last quarterly periscope. (Vide, No. xxxvi. p. 498.)

*Article twenty-eight.* Case of Congenital Cataract in Both Eyes, Successfully Treated by Operation. By D. S. Young, Esq. The patient was a native lad twelve years old. He had congenital cataract of both eyes. He stated that he knew the difference between day and night, but could not see any objects that were presented to him. He had no conception whatever of colours. The pupils dilated and contracted in a healthy manner. After the pupil was dilated with belladonna, Mr. Young operated on the left eye by passing a spear pointed needle into the posterior chamber, in front of the lens, in the usual manner. The anterior capsule of the lens was lacerated, and the whole contents, which were milky and flocculent, discharged into the anterior chamber. The needle had now to be withdrawn, the turbidity of the anterior chamber preventing the further progress of the operation. The instant the fluid contents of the capsule, by freely mixing with the aqueous humour, had become diluted, so as to admit of the partial transmission of light to the retina, the boy saw the objects around him, and his language and gestures were highly expressive of the delight he experienced, from enjoying the first manifestations of a new sense. The eye was tied up, and a wet cloth kept to it, that had been dipped in an astringent wash. In seventy-two hours, the whole of the fluid cataract was absorbed; the anterior chamber had become free from turbidity, and a very small particle of the capsule seen before the axis of vision. The pupil was clear and black, and contracted powerfully; but the light was so painful and embarrassing to the poor boy, that he would not for several days permit the bandage to be taken off. On the 10th day after the operation, the sight had improved so much, and the susceptibility to light had so far abated that the operation was performed on the other eye. The cataract of this was of a soft cheesy nature; it was cut up into as small fragments as possible—several of these were pushed into the anterior chamber and one large fragment into the vitreous humour. Some adhesions to the uvea were destroyed. In six days the pupil was black and clear, and all the fragments of the lens had become absorbed; the sight was better in this than the other eye: little inflammation supervened.

On his return from the Residency to Bolaram, Mr. Y. brought the boy with him, and was for some time engaged in the interesting task of giving him instructions relative to colours, &c. He was soon able to distinguish any colour; but if the boy wished to be very correct, when asked the name of any thing presented to him, he would first look at it, and if he had seen it before, and it had been explained, he at once named it; but if the object were new, he would tell the colour, and then feel it with his fingers; and should it turn out to be any thing he had been accustomed to handle before he got his sight, he at once exclaimed a pair of scales, rice, curry stuff, or whatever it might happen to be. The condition of the boy three months after the operation is thus described:

"His vision is much improved, and he now seems to recognise almost every object that is brought within a foot of his eyes. Distant objects he describes as either light or dark, but he has no correct perception of them. His field of dis-

*tinct* vision is therefore limited; but he has lost much of the awkwardness and helplessness, which were so apparent two months ago, and he now walks about with some confidence. The eyes, with the exception of a rolling and want of entire association in their movements, have a healthy appearance."

**Article twenty-nine.** Case of Arrow-Wound of the Head. By A. Stone, Esq. Captain — received on the morning of the 24th of October two arrow-wounds, one in the head, and the other in the back. On the morning of the 27th he stated that he felt slightly stunned when wounded, and that the arrow could not be withdrawn without force; but he did not complain of much uneasiness. The wound was in the middle of the occipital bone, and was partially closed. On the 31st complaining more of his head, and feeling feverish, he was on the ensuing day reported sick, when he had a purgative, and in the evening was bled to syncope; next day fifty leeches were applied to the head. 2nd Nov. Felt greatly better; bowels opened two or three times; the wound appeared a little puffy; it was opened with a lancet and a poultice applied—tongue very foul and loaded. 3d. Headache; tongue still foul; pulse full and frequent; was bled 15oz., and purged by calomel and colocynth: Stomach irritable; no fluid medicine retained. 4th. Stools very offensive; headache chiefly confined to temples; skin hot and feverish. Four grains of calomel were repeated three times and cups applied to the neck. 5th. Shifting pain in head; wound discharging a small quantity of good pus; tongue loaded, stools dark and offensive; again cupped: calomel continued; a purge of colocynth and resin of jalap given, which acted freely. 6th. Much better; skin cooler and moister; stools dark and offensive; pulse eighty; tongue cleaner. In the evening sat up in a chair, and complained soon after of being cold, shivered, and complained that his head gave him great uneasiness; venesection to 14oz. Forty leeches to head, previously shaved, and cold cloths applied; five grains calomel every two hours during the night. 7th. Calomel continued, and the bowels pretty freely opened by enemata; pulse eighty; is sensible when roused; but occasionally talks incoherently; pain of head moderate; again leeches and cupped: stools green, black and fetid; bowels moved with difficulty; tongue furred and dark; urine high coloured; pupils sensible; no paralysis; pulse variable in strength: blister to the neck; wound again opened, giving vent to a slight discharge; fifty leeches to the occiput. The bone was felt bare, as on other occasions, but the probe could not be made to enter the cavity. From this time until the morning of the 14th, when he died, he gradually got worse. The fever came on every second day, with a slight exacerbation on the intermediate ones; his mouth was a little sore from the mercury, but the stools continued dark and fetid to the last; he was at times sensible, but for the last two or three days comatose.

"The head was examined on the 14th. The scalp presented nothing remarkable; on raising the scull, about an ounce of dark venous blood escaped; the pericranium was detached for a small space near the wound; membranes generally were free from disease; the vessels of the brain rather more turgid than usual. The arrow, a round one, had penetrated a little to the left of the centre of the occipital bone, slanting to the external wound. The dura mater and brain had been wounded, the latter not deeply; two splinters from the internal table were loose: one of them about the size of a split pea, was lying on the dura mater near the wound; there was no depression of bone. On opening the dura mater, about half an inch from the surface, an abscess was discovered; the left lateral ventricle was also full of matter; in both abscesses pus, to the extent of two or three ounces, was contained. The substance of the brain in the tract of the abscess was pappy and soft."

**Article thirty.** Cases of Colica Pictonum, with observations. By D. Stewart, Esq. The most remarkable circumstance connected with the history of these cases is the length of time, eight or nine weeks, which intervened between the administration of the poison, carbonate of lead, and the occurrence of

the acute symptoms of colica pictonum. "On this head," remarks the author, "I find it stated by Dr. A. T. Thomson, that the effects of the poison of carbonate of lead are cumulative, like those of digitalis; and the above cases seem to be strikingly illustrative of this observation, and may account for the universality of the seizures about the same time."

The *appendix* to the present volume contains twenty articles, being chiefly short notices of cases. Mr. Brett presents a notice of five cases of blindness from cataract, one congenital and four from early infancy, successfully treated by operation. One case occurred in a native aged twenty-five years, who had been blind from the age of five years. The operation was successful on the left eye, but the right became amaurotic, after rather a smart attack of inflammation. The case is considered principally remarkable as showing the aptitude of the optic nerve to resume its functions, after having remained for so long a period as twenty years in a dormant state.

Mr. Gilmore gives an account of a man, in whose stomach a number of rupees were found on post mortem examination. The patient was said to have laboured under an anomalous affection characterized by agonizing pain at the pit of the stomach, recurring in paroxysms, only to be alleviated by strong external pressure, but as it was unattended with any unequivocal indications of constitutional disturbance, the man was set down as an impostor. He occasionally was affected with fever or diarrhœa, but never complained to the surgeon of the pain in the stomach. A week or two before his death, a great change was perceived in his appearance, and it was found that he had diarrhœa, and laboured under great debility. Tonics and opiates were administered, but he gradually sank, without alluding to his former weakness or seeming to endure much suffering. On opening the abdomen Mr. G. was struck with the general unhealthy aspect of the viscera, particularly of the stomach, which was greatly elongated, contracted in its calibre, thickened in its coats and altered in its colour. While searching for the pyloric extremity, the serous tunic gave way, and through the small circular perforation thus formed, the semifluid contents of the stomach escaped.

A large indurated moveable mass was now discovered within the viscus, which was conjectured to be a scirrhus tumour, or a bone, but a bystander mentioned that he had once heard that the deceased many years before had swallowed fifteen rupees, and that the tumour felt was probably formed by the money; on laying open the stomach, nine pieces of silver, placed *en rouleau*, were found at the pylorus; close to which a circular ulceration, with dense indurated edges, had been excavated, the lesion of the base of which had allowed the aliment, as before stated, to escape. The stomach besides being thickened, was lined internally with a tenacious gray varnish, and embossed as it were, with large prominent veins. When about to rip up the intestines in search of the other six rupees, a convict informed Mr. G. that the deceased had at successive times passed that number by stool. But little impression had been made on the coin by the gastric juice.

Mr. Rose relates a case of cholera, successfully treated by copious draughts of cold water. When brought to the hospital the patient was in a complete state of collapse. Before the arrival of Mr. R. a large dose of calomel and laudanum had been administered, which was immediately rejected by vomiting. The patient was now supplied with *cold water ad libitum*. His thirst was excessive, and in alternate drinking and vomiting, he continued throughout the night, showing symptoms of gradual improvement. At six o'clock, A. M. secretion was completely established, stools no longer passed involuntary, and in a short time after, the urine commenced flowing. The secondary fever was smart, but manageable, and the man returned to his duty five or six days afterwards. About three o'clock, P. M., of the first day, a second dose of calomel

and laudanum was by mistake administered, but as these medicines were immediately rejected, Mr. R. does not think the successful result can in any manner be attributed to them.

As the Calcutta Transactions is a work to which few of our readers can have access, we have endeavoured to give them a very full analysis of the most interesting of the articles contained in the present volume. We have carefully abstained from any comment upon the facts and opinions advanced, in consequence of our limited space, and the extent to which this article had necessarily to be extended in order that a fair, and at the same time, useful abstract of the different papers might be presented.

D. F. C.

ART. XV. *Recherches sur les complications qui accompagnent la Rougeole chez l'enfant; thèse présentée et soutenue à la Faculté de médecine de Paris, le 15 Avril, 1835.*  
Par ISIDORE BOUDIN, Docteur en médecine; Elève des hôpitaux; membre fondateur de la Société Médicale d'observation.

*Researches into the Measles of Children, &c., by ISIDORE BOUDIN, M. D.*

In the month of May, 1832, the measles broke out in Paris, and reigned for several months in an epidemic form. A number of children attacked with it at this time were received into the children's hospital, and placed in the ward of M. Jadelot, where the author of the above thesis then fulfilled the duties of resident physician. Those whose histories form the subject of this work, had become orphans during the prevalence of the cholera, and had been placed by the public authorities in a poor house in the rue de l'oursine; from thence, when attacked with measles, they were removed to the children's hospital, on which account it was impossible to obtain any information in relation to their condition previous to admission. The symptoms, at the time of admission, were examined and recorded with the most scrupulous accuracy, and all the means of exploration which long habit had rendered familiar were put in requisition in order to supply, as far as possible, the deficiencies which must necessarily exist in the histories of disease amongst children on account of their inability to give any satisfactory account of their own feelings.

M. Boudin is well known in Paris as a successful and indefatigable observer. He has here given us the analysis of only ten cases, occurring in children between the ages of two and seven years, and terminating fatally in all, so that we have an opportunity of comparing the symptoms with the post mortem appearances; the precise condition of all the organs, whether healthy or unhealthy, having been fully described.

The constitution of all these children, judging from their general conformation, appeared to be good; there were no indications of a scrofulous habit of body.

In every case the eruption was well marked and rather of a red than rose colour; about the second day, and from that to the fifth, it began to assume a violet aspect. The pulse varied from 160 to 130 per minute. The usual symptoms of simple conjunctivitis existed in every case except one, and in this a violent purulent ophthalmia discovered itself, which terminated in the complete destruction of both eyes.

In six cases, the tongue is described as being of the same colour as the lips towards its point, and covered with a slight whitish fur towards the base. In four the redness was a little more vivid. Humid at first, it became dry towards the termination of the complaint. Notwithstanding this nearly natural condition of the tongue, evident marks of inflammation of the stomach were found in several cases. Thus in three of them there were found from five to twelve ulcerations in each stomach. These ulcerations were from two to three lines